

CALFED PSP COVER SHEET

Proposal Title: **East Antioch Creek Marsh Restoration Project**

Applicant Name: **J. Michael Walford, Chief Engineer**

Mailing Address: **Contra Costa County Flood Control and Water Conservation District**
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Email: jwalford@pw.co.contra-costa.ca.us

Amount of funding requested: \$ 485,000.00 for 1 year

Indicate the topic for which you are applying (check only one box)

- | | |
|---|---|
| <input type="checkbox"/> Fish Passage/Fish Screens | <input type="checkbox"/> Introduced Species |
| <input checked="" type="checkbox"/> Habitat Restoration | <input type="checkbox"/> Fish Management/Hatchery |
| <input type="checkbox"/> Local Watershed Stewardship | <input type="checkbox"/> Environmental Education |
| <input type="checkbox"/> Water Quality | |

Does the proposal address a specified Focused Action? X Yes No

What county or counties is the project located in? **Contra Costa County**

Indicate the geographic area of your proposal (check only one box):

- | | |
|--|---|
| <input type="checkbox"/> Sacramento River Mainstem | <input type="checkbox"/> East Side Trib: _____ |
| <input type="checkbox"/> Sacramento Trib: _____ | <input type="checkbox"/> Suisun Marsh and Bay |
| <input checked="" type="checkbox"/> San Joaquin River Mainstem | <input type="checkbox"/> North Bay/South Bay: _____ |
| <input type="checkbox"/> San Joaquin Trib: _____ | <input type="checkbox"/> Landscape (entire Bay-Delta watershed) |
| <input type="checkbox"/> Delta: _____ | <input type="checkbox"/> Other: _____ |
| <input type="checkbox"/> | |

Indicate the primary species which the proposal addresses (check all that apply):

- | | |
|--|--|
| <input type="checkbox"/> San Joaquin and East-side Delta tributaries fall-run chinook salmon | <input type="checkbox"/> Spring-run chinook salmon |
| <input type="checkbox"/> Winter-run chinook salmon | <input type="checkbox"/> Fall-run chinook salmon |
| <input type="checkbox"/> Late-fall run chinook salmon | <input checked="" type="checkbox"/> Longfin smelt |
| <input checked="" type="checkbox"/> Delta smelt | <input checked="" type="checkbox"/> Steelhead trout |
| <input checked="" type="checkbox"/> Splittail | <input checked="" type="checkbox"/> Striped bass |
| <input type="checkbox"/> Green sturgeon | <input checked="" type="checkbox"/> All chinook species |
| <input checked="" type="checkbox"/> Migratory birds | <input checked="" type="checkbox"/> All anadromous salmonids |
| <input type="checkbox"/> Other: _____ | |

Specify the ERP strategic objective and target(s) that the project addresses. Include page numbers from January 1999 version of ERP Volume I and II:

Achieve recovery of at-risk native species dependent on the Delta. Increase the population and distribution through habitat restoration accompanied by reduction in stressors. Work with local stakeholders to refine, evaluate, prioritize, implement and monitor restoration actions.
Vol I pg. 25-35, 130-154, 190-225, 247-253, 354-364, 368-387 451-510; Vol II pg. 54-115.

Indicate the type of applicant (check only one box):

- | | |
|---|---|
| <input type="checkbox"/> State agency | <input type="checkbox"/> Federal agency |
| <input type="checkbox"/> Public/Non-project joint venture | <input type="checkbox"/> Non-profit |
| <input checked="" type="checkbox"/> Local government/district | <input type="checkbox"/> Private party |
| <input type="checkbox"/> University | <input type="checkbox"/> Other: _____ |

Indicate the type of project (check only one box):

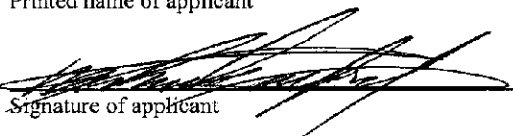
- | | |
|-------------------------------------|--|
| <input type="checkbox"/> Planning | <input checked="" type="checkbox"/> Implementation |
| <input type="checkbox"/> Monitoring | <input type="checkbox"/> Education |
| <input type="checkbox"/> Research | |

By signing below, the applicant declares the following:

1. The truthfulness of all representations in their proposal;
2. The individual signing the form is entitled to submit the application on behalf of the applicant (if the applicant is an entity or organization); and
3. The person submitting the application has read and understood the conflict of interest and confidentiality discussion in the PSP (Section 2.4) and waives any and all rights to privacy and confidentiality of the proposal on behalf of the applicant, to the extent as provided in the Section.

J. Michael Walford

Printed name of applicant


Signature of applicant

Title Page

Title of Project:

East Antioch Creek Marsh Restoration Project

Name of Applicant, Address, Phone, Fax, E-mail:

J. Michael Walford, Chief Engineer
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255 Glacier Drive
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Participants and Collaborators:

- **Lead Agency:**
Contra Costa County Flood Control & Water Conservation District
contact: Dean Eckerson
- City of Antioch
contact: Joseph Brandt
- Mt. Diablo Audubon Society
contact: Nancy Wenninger
- Aquatic Outreach Institute
contact: Kathy Kramer

Type of Organization and Tax Status:

A California Special District. Exempt.

Tax Identification Number: 94-6000509

EXECUTIVE SUMMARY

The project is located in the lower reach of East Antioch Creek between the San Joaquin River and Lake Alhambra. The East Antioch Creek Watershed is located within the City of Antioch and consists of roughly 7,000 acres or 11 square miles. Situated in the Sacramento-San Joaquin Delta Ecological Management Zone within the Central and West Delta, the East Antioch Creek Marsh Restoration Project will be conducted in two phases and has three identified goals:

- Enhanced marsh expansion and restoration.
- Increased tidal and storm flow capacity.
- Establishment of community-based conservation through public education and outreach programs.

By creating, constructing and enhancing marshland in the East Antioch Creek Watershed Drainage to receive tidal flows, the public will not only be provided with improved flood protection but with ecosystem enhancements and water quality improvements. The project will also look at ways to decrease flooding in a more ecological way. In addition the project will create and enhance 26 acres of saline emergent wetland by restoring tidal action to lower East Antioch Creek.

The cohesive partnership between the Contra Costa County Flood Control and Water Conservation District, City of Antioch, Mt. Diablo Audubon Society and Aquatic Outreach Institute makes for an ideal project designed to achieve recovery of at-risk species with minimal ongoing human intervention. To aid in the recovery of endangered species, you must first create habitat. The restored tidal marsh will provide habitat for the native delta smelt (*Hypomesus transpacificus*), Sacramento splittail (*Pogonichthys macrolepidotus*) and refugia for salmonids. Islands within the marsh will provide safe nesting for a variety of bird species including the Priority Group II, at-risk California black rail and Suisun song sparrow. The restored tidal action, native aquatic vegetation, and renewed management of the project area will improve water quality by allowing for proper flushing of the system.

Environmental education programs are important and in tandem with the solutions for comprehensive flood management modifications proposed by the Contra Costa County Flood Control and Water Conservation District. The Aquatic Outreach Institute has partnered to implement an extensive outreach and stewardship program. Designed to educate and involve the general public and local teachers as stakeholders in the marsh, the Institute proposes to lead a series of outdoor events that would allow citizens to implement volunteer monitoring, invasive species control, and restoration components associated with this nationally recognized public program.

Although both phases are discussed throughout this proposal, funding is being requested for Phase 1 at this time and the Contra Costa County Flood Control and Water Conservation District will respond to a subsequent CALFED PSP to fund the second phase. Phase 1 of the project is bordered by Wilbur Avenue to the north and Cavallo Road to the southeast, and covers work south of Wilbur Avenue. This phase has four tasks.

- Task 1.1- Environmental: Compliance and Obtainment of
Regulatory Permits under CEQA and NEPA
- Task 1.2 - Engineering Work and Wetlands Excavation
- Task 1.3 - Landscaping Work
- Task 1.4 - Education

The total project costs for Phase 1 are \$921,850. The local cost share contribution is \$436,850 and the requested CALFED funding is \$485,000.

PROJECT DESCRIPTION

The project is located in the lower reach of East Antioch Creek between the San Joaquin River and Lake Alhambra. The East Antioch Creek Watershed is located within the City of Antioch and consists of roughly 7,000 acres or 11 square miles. Conducted in two phases, the East Antioch Creek Marsh Restoration Project has three goals: marsh expansion and restoration, an increase in tidal and storm flow capacity, and the establishment of community-based conservation through education and outreach programs. The project will also look at ways to enhance and decrease flooding in a more ecological way. Although both phases are discussed throughout this proposal, funding is being requested for Phase 1 at this time and the Contra Costa County Flood Control and Water Conservation District will respond to a subsequent CALFED PSP to fund the second phase.

Phase 1 of the East Antioch Creek Restoration Project will begin with the removal of rubble and debris placed in the marsh area in the 1960's. Removal of natural earth embankments will increase the overall tidal marsh area. Work will commence by using a backhoe and earth removal equipment for the project. Excavation will move away from the water as soil and material is removed and the banks of the creek are brought to elevations appropriate for healthy saline emergent wetland vegetation. Upland native vegetation is found in higher areas and will be left as islands to preserve mature habitat improving the diversity of the marsh area. These and other efforts will be made to protect existing habitat during construction. As some upland vegetation will be lost as the area is converted to marsh.

The culverts will be installed by open cutting of Wilbur Avenue, enhancing tidal action to the existing and expanded marsh. Wing walls will be constructed to support the embankment above the culverts. Native vegetation will be planted in the marsh and along the banks. An outdoor educational facility will be constructed, including a small amphitheater for outdoor classes, picnic tables, benches for viewing the marsh, trash containers, a drinking fountain and toilet facilities. Also, the facility will include an entry road with a bus turnaround and ample parking. Additionally, trails will be constructed to connect several viewing and research platforms for water sampling around lower East Antioch Creek.

Phase 1 of the project is bordered by Wilbur Avenue to the north and Cavallo Road to the southeast, and covers all work south of Wilbur Avenue. This phase has four tasks.

Task 1.1- Environmental: Deals with Compliance and Obtainment of Regulatory Permits under CEQA and NEPA. This task will require assistance from the Environmental Planner, Environmental Assistant and a secretary. The process will begin in January 2000 and end in June 2000.

Task 1.2- Engineering Work and Wetlands Excavation: For this task of Phase 1, the engineering work will commence. The task will include surveying of the parcel and obtaining the necessary right of way. The preliminary, final design, and construction stages of wetlands grading and the culverts are included in this task. Surveying tasks will be conducted in September and October 1999. The preliminary design will begin in October 1999 and end in February 2000. Work on the final design will occur from March to June 2000. Project construction is slated to last from July

2000 to September 2000.

Task 1.3 is Landscaping Work. This task includes the development of the outdoor educational site, the trails and boardwalk. It will take nine months, January 2000 to September 2000, to complete the preliminary and final design and to complete the actual construction. During this time the parking lot, including the bus turnaround, and the educational site will also be constructed. This task will also include the replacement of vegetation in the marsh and surrounding upland areas.

Task 1.4 is the Education component. The education component includes public scoping; background research and data gathering including the ecological and biological history of the area. Public scoping also includes contact and involvement with the schools and development of the outreach programs. Invasive species control is another part of the education component designed to lead a series of outdoor events that will move the citizens group to implement the monitoring of invasive species control and restoration components beginning with abatement/control of nonnative plants and wildlife. Also included is restoration; monitoring and accounting of the habitat which makes up the public involvement and Volunteer Monitoring Program. The Educational and Outreach Program and Volunteer Monitoring Program is designed to last the life of the grant, from funding in September 1999 until the grant is resubmitted in September 2000.

Phase 2 of the project is work north of Wilbur Avenue and includes Wetlands Grading and Excavation. Enhanced public awareness from the educational component of the project will have increased the local cost sharing support at the time of resubmission to CALFED through the Educational Outreach and Volunteer Monitoring Program.

Task 2.1 is the environmental component. The crucial nature of this task is dependent upon the environmental analysis associated with the acquisition and incorporation of the Hickmott Parcel in the marsh expansion.

Task 2.2 is the right of way component. This task includes the acquisition of the Hickmott parcel and seven minor parcels surrounding the marsh are contiguous with the parcels owned in fee by the Flood Control District. Seven parcels will bring the marsh and riparian area into public ownership.

Task 2.3 is the Engineering Work. This section has a Sub-Task concerned with Engineering Work and Wetlands Excavation including the surveying, topographic work, and design of the wetland creation. A bridge or larger culverts will be needed to allow for further tidal action to the marsh at the intersection of Fulton Shipyard Road and McElheny Road from local in-kind contribution.

Task 2.4 is the Hazardous Material Clean Up of the Hickmott Parcel acquired in Task 2.2. The hazardous material clean-up plan and execution will be conducted after Phase 2 has been funded because chemical and environmental tests need to be conducted to provide the prudent scientific knowledge necessary to make a cost determination.

Task 2.5 is the Landscaping Work linking Phase 1 trails and boardwalk to the project.

Task 2.6 is the Educational and Outreach and Volunteer Monitoring portion of the project including public involvement, school programs, invasive species control, restoration, monitoring and accounting for the marsh restoration project.

ECOLOGICAL/BIOLOGICAL BENEFITS

By creating, constructing and enhancing marshland in the East Antioch Creek Watershed Drainage to receive tidal flows, the public will not only be provided with improved flood protection but with ecosystem enhancements and water quality improvements. The proposed two phase project will create and enhance 26 acres of saline emergent wetland by restoring tidal action to East Antioch Creek located in the Sacramento-San Joaquin Delta Ecological Management Zone within the Central and West Delta.

Rehabilitating the natural capacity and functional connectivity of the Bay-Delta estuary and its watershed has been identified as the preferred method for the 1999 funding priorities reflecting goals identified in the draft Strategic Plan for Ecosystem Restoration. The cohesive partnership between the Contra Costa County Flood Control and Water Conservation District, City of Antioch, Mt. Diablo Audubon Society and Aquatic Outreach Institute makes for an ideal project designed to achieve recovery of at-risk species with minimal ongoing human intervention. As stated in the February 1999 revised draft version of the ERP, Volume II, on page 54, *"The Delta is home to many species of native and non-native fish, waterfowl, shorebirds, and wildlife. All anadromous fish of the Central Valley migrate through the Delta or spawn in, rear in, or are dependent on the Delta for some critical part of their life cycle. Many of the Pacific Flyway's waterfowl and shorebirds pass through or winter in the Delta."*

To aid in the recovery of endangered species, you must first create habitat. The restored tidal marsh will provide habitat for the native delta smelt (*Hypomesus transpacificus*), Sacramento splittail (*Pogonichthys macrolepidotus*) and refugia for salmonids. Islands within the marsh will provide safe nesting habitat for a variety of bird species including the Priority Group II, at-risk California black rail and Suisun song sparrow. The salt-marsh harvest mouse would also benefit. The restored tidal action, native aquatic vegetation, and renewed management of the project area will improve water quality by allowing for proper flushing of the system. The process of mixing freshwater with tidal waters from the Delta is critical for replacing nutrients and balancing salinity concentrations, which support large numbers of important microorganisms. This forms the basis for the foodweb that will support and maintain rearing habitats for many fish species and migratory birds in the project area. The *Recovery Plan for the Sacramento/San Joaquin Delta Native Fishes* by the US Fish and Wildlife Service, November 1996, reiterates that long-term survival of native fishes depend upon conditions in the estuary having adequate habitat through marsh restoration.

The deterioration of the zooplankton community and its algal food supply in key habitat areas of the Bay-Delta is a serious problem because striped bass (*M. salmoides*), delta smelt (*H. transpacificus*), Chinook salmon (*O. tshawytscha*) and other species feed almost exclusively on zooplankton during the early stages of their life cycles. Declines in the production of juveniles of these fish species appear to coincide with the declines in algae and zooplankton. Improvements can be gained by increasing shallow-water habitat and tidal wetlands in the Bay and Delta. The wetlands excavation work proposed in phase one of the project would create hydraulic conditions allowing for development and accumulation of high zooplankton populations. Presently, tidal gates at the mouth of East Antioch Creek prevent tidal flows from entering the creek from the San Joaquin River.

The abundance of important aquatic foodweb organisms would increase, link, and enhance populations of the shorebird and wading bird guild. Mt. Diablo Audubon Society has partnered in this proposal to help restore the valuable habitat. These particular species are significant

components of the ecosystem and high interest to recreational bird watchers. The great blue heron, great egret, black-crowned night heron and the green heron have been sighted during various visits to the marsh site over the last three years. Native at-risk species including the California black rail and the Suisun song sparrow would reap benefits from the designed enhancement of upland habitat. Creation of islands would allow escape and refuge from the elevated water level associated with the highest tides and high outflow conditions in the East Antioch Creek Watershed Drainage area. There is a shared vision to assist in the recovery of the state-listed threatened species contributing to overall species richness and diversity. Funding for the proposed project would allow for habitat restoration and recovery, and improving the connection between wetland and upland habitat to reduce predation through natural self-sustaining methods while allowing for an incorporation of adaptive management strategies in the future projects.

Environmental education programs are important and in tandem with the solutions for comprehensive flood management modifications proposed by the Contra Costa County Flood Control and Water Conservation District. The Aquatic Outreach Institute has partnered to implement an extensive outreach and stewardship program. Designed to educate and involve the general public and local teachers as stakeholders in the marsh, the Institute proposes to lead a series of outdoor events that would allow citizens to implement volunteer monitoring, invasive species control, and restoration components associated with this nationally recognized public program. Six components (see Local Involvement) would serve the dual purpose of promoting stewardship values to the general public and assist the County Flood Control District with restoring the marsh. By building an on-site educational facility with an entry road, turnaround and parking area for school buses and several cars, the community of Antioch will be enriched. Picnic tables, benches, trash containers, drinking fountains and toilets will be provided at the public facility. A small amphitheater, a kiosk describing the wetlands and their importance with walkways connecting to a series of wildlife viewing and water sampling platforms and signage has been included in phase one of the proposed CALFED project providing true ecological and biological enhancement, benefiting all ages and races with knowledge and opportunity.

Restoration opportunities are rare. The City of Antioch recognizes and supports the project as home to the perfect location for marsh restoration. The Antioch Dunes Ecological Reserve is situated to the east of the proposed project site. In Volume I: Ecosystem Restoration Program Plan, Vision for Plant Community Groups, Revised Draft: February 1999, page 385, *this unique vicinity is habitat for two plant and one butterfly species listed as endangered under the federal Endangered Species Act. Development of small boardwalks will reduce human disturbance in areas where recreational access or interpretive trails are needed. Linkage with other ecosystems is a vision that would provide high-quality habitat for associated special-status plant and animal populations.* The major issue in the Bay-Delta that lead to the creation of CALFED centered on the conflict between water management and the protection and recovery of listed species. (pages 177-185, Table 13- *Strategic Plan Goals and Objectives for Species and Species Groups*, and Table 14- *Basis for Selection of Species and Species Group Ecosystem Elements*, are valuable references to concise information). Funding of the proposed project would minimize the need for future endangered species listings. In reversing downward population trends of native species, the East Antioch Creek Marsh Restoration Project would provide the proper balance of nutrients and water quality improvements through enhanced hydrologic flow. In addition, create desired habitat necessary at this strategic junction: the confluence of the San Joaquin and Sacramento Rivers in the Central and West Delta.

TECHNICAL FEASIBILITY AND TIMING

The Contra Costa County Flood Control and Water Conservation District (District) prepared the East Antioch Creek Watershed Area Drainage Improvement Plan (Plan) to address issues concerning development in the upper watershed and flooding in the lower watershed. In the Plan, several alternatives were evaluated for the reach of East Antioch Creek downstream of Lake Alhambra (referred to as Reach 1). Some alternatives were considered but rejected early in the planning process and not further evaluated in the EIR due to unacceptable financial, social, and environmental impacts.

Three alternatives for improvement to Reach 1 were evaluated thoroughly. Alternative #1 included realignment of East Antioch Creek to outfall to the west, preservation of the existing marsh area, and minor improvements to tidegates, weirs, and culverts. Alternative #2, (the Preferred Alternative), allowed the Creek to outfall to the San Joaquin River at its current location (although improving conveyance), preserved the existing marsh, and allowed for minor improvements to tidegates, weirs, and culverts. Alternative #3 called for the transformation of the marsh area into an earthen trapezoidal channel. Alternative #2 was eventually selected due to the reduced environmental impacts and lower associated financial costs.

The East Antioch Creek Marsh Restoration Project (Project) will require additional CEQA and NEPA review, most likely a Negative Declaration/Environmental Assessment. The CEQA document will use the existing Plan as a master document and assess the impacts of proposed changes to the Plan as defined by the Project. The NEPA document will be a stand-alone document. The Project conforms to the County's General Plan and the City of Antioch's Creek Development Policy.

The improvements to the marsh, weirs, and culverts will require regulatory permits from the US Corps of Engineers (Corps), Central Valley Regional Water Quality Control Board and the California Dept. of Fish and Game (Department). The marsh improvements will likely qualify for a combination of Nationwide #27 (Restoration) and #33 (Temporary Fill) Corps permits. The work on the culverts and weirs will likely qualify for a combination of Nationwide #3 (Maintenance) and #33 Corps permits. The possibility of federally listed species occupying a portion of the project site will likely require at least an informal consultation with the US Fish and Wildlife Service (Service). Based upon the results of the informal consultations, a formal Section 7 consultation may be required. These permits have not yet been acquired.

As the total area of the project will exceed one acre, the Project will require Certification by the State Water Resources Control Board. A Storm Water Pollution Prevention Plan will be required under the proposed changes to the State National Pollutant Discharge and Elimination System General Construction Permit. A Streambed Alteration Agreement will be obtained from the Department as per Section 1601 of the Fish and Game Code. The District will consult with the Department if any State listed species may occur at the Project site. If required, Section 2106 permits will be obtained for any impacts to State listed species. These permits have not yet been acquired.

MONITORING AND DATA COLLECTION METHODOLOGY

Objectives. The monitoring component of this proposal has two objectives. The first is to measure progress on meeting our biological/ecological objectives. The second is to educate the local community and encourage stewardship of a significant natural resource. The methodology to be used is a volunteer monitoring program. The assumptions in this approach are that restoring tidal flows will improve overall quality of the wetland, and that volunteer monitors can collect the data needed to verify or disprove this assumption. A further assumption is that improving habitat will increase and diversify animal populations. The methodology to be used:

1. Assemble a planning committee of key volunteers, a program coordinator, scientific advisors, and data users.
2. Ascertain what is already known: what, if any, baseline data already exists?
3. Review goals and objectives, who will use the data and how, what parameters will be measured, and what the data quality requirements are.
4. Review protocols.
5. Determine location of monitoring sites, time of day, and frequency of monitoring.
6. Decide how the data will be managed and presented.
7. Develop a written quality assurance plan.
8. Plan for volunteer recruitment, training, and retention.
9. Schedule training date.
10. Line up trainers.
11. Hold the training.
12. Launch pilot program.
13. After pilot stage, evaluate and adjust program based on findings.
14. Continue program to conclusion of project and beyond, if necessary.

The protocols to be used are found in the Methods Manual prepared by EPA for *Volunteer Water Monitoring: A guide for State Managers, Volunteer Estuary Monitoring, Volunteer Lake Monitoring, Volunteer Stream Monitoring: A Methods Manual, and Volunteer Monitoring Protocols* (SFEI). The *Baylands Ecosystem Habitat Goals* prepared by the San Francisco Bay Area Wetlands Ecosystem Goals Project will be used for reference and guidance throughout the project.

Parameters. Volunteers will collect baseline characterization data and document change over the length of the project. They will assess water quality, as well as physical and biological characteristics. The data gathered will be used by the volunteers themselves, local teachers, members of the Mt. Diablo Audubon Society, engineers and planners at the District, and staff in the Department of Community Development and Department of Public Works at the City of Antioch. The volunteer monitoring program will begin in phase one.

Evaluation. All measurements will be taken before, during, and after the culvert is opened and other restoration efforts are undertaken. As a part of the quality assurance plan, volunteers will be trained and retrained, and data will be reviewed by trainers or planning committee members on an ongoing basis for accuracy and reliability. Analysis will be based on the kinds of data collected and the methods used.

MONITORING AND DATA COLLECTION INFORMATION

BIOLOGICAL/ECOLOGICAL OBJECTIVES		
Restore tidal flow to the marsh, improve water quality and habitat value		
Hypothesis/Question to be Evaluated	Parameters and Data Collection Approach	Data Evaluation Approach
Flow will be restored	Flow measurement using a portable meter	Technical review, quantitative analysis
Water quality will change	Dissolved oxygen using modified Winkler titration	Technical review, quantitative analysis
	Nutrients using a colorimeter or lab analysis	Technical review, quantitative analysis
	Phytoplankton using visual assessment or a Van Dorn sampler	Technical review, quantitative analysis
	Coliform and E. coli bacteria using Colilert	Technical review, quantitative analysis
	Salinity using a hydrometer	Technical review, quantitative analysis
	Temperature using a Celsius thermometer	Technical review, quantitative analysis
Submerged aquatic vegetation will be altered	Quadrant sampling and transects	Technical review, quantitative analysis
Streamside vegetation will be altered	Quadrant sampling and transects	Technical review, quantitative analysis
Animal populations are present and may increase	Point counts and censuses	Technical review, quantitative analysis

LOCAL INVOLVEMENT

On March 23, 1999, the Contra Costa County Board of Supervisors, governing board of the Contra Costa County Flood Control and Water Conservation District, authorized J. Michael Walford, Chief Engineer of the District, to sign and submit a Proposal Solicitation Package to the CALFED Bay-Delta Program for grant funding of the East Antioch Creek Marsh Restoration Project. An announcement of the project was made to the local community and the community leaders of Antioch. Adjacent landowners received a letter describing the phases of the proposed project to protect the sensitive habitat and enhance their valuable community resource.

Support of the project has been met with open arms, and considered favorable with no third party impacts identified. The City of Antioch, Lake Alhambra Homeowners Association, Contra Costa Clean Water Program, Dow Chemical, Southern Energy of California (formally PG&E), will make in-kind contributions while the Delta Diablo Sanitation District will consider both an in-kind and cost share if the proposal is funded.

The Aquatic Outreach Institute is a project partner that will implement an extensive outreach and stewardship program to educate and involve the general public and local teachers as stakeholders in the marsh. The program will be based on two successful Watershed Awareness Programs that the Institute has created and developed for Alameda County with support from the Alameda County Flood Control and Water Conservation District. The Watching Our Watersheds teacher-training program was funded in 1998 by the EPA and in 1999 by the Contra Costa Clean Water Program, cities of El Cerrito, Richmond, San Pablo; and the San Francisco Foundation. The public involvement program consists of six components as outlined below.

1. **Scoping-** background research and data gathering including: ecological/biological history and status of the area, contacting local activists and community members, schools and teachers; building relationships with local government personnel and the media.
2. **Public Involvement-** consists of community organizing: building a database, writing articles, press releases, calendar listings, and a community newsletter; holding community meetings and events; launching project-oriented components of the program; forming an active citizens' group, and helping stakeholders to draft a mission statement, goals, and action plan.
3. **School Programs-** coordinate with local schools and teachers involving students in one or more of the outdoor events: cleanup; history walk; wetland walk; bird walk; animal and plant species surveys; as well as, the monitoring program.
4. **Invasive Species control-** lead a series of outdoor events that will move the citizens group to implement the monitoring of invasive species control and restoration components, and commence abatement/control of nonnative plants and wildlife.
5. **Monitoring-** collect baseline data using the standard framework for a citizen monitoring effort to measure progress on meeting biological/ecological objectives; educate the local community and encourage stewardship of the valuable natural resources; and assess water quality changes over the length of the project.
6. **Restoration-** lead a series of events beginning with revegetation of wetlands and uplands through two to four restoration workdays; promote stewardship values; and assist the District with restoring the marsh.

COST ***Phase 1**

Task	Direct Labor Hours	Direct Salary & Benefits	Service Contracts	Material & Acquisition Costs	Misc. & Other Direct Costs	Overhead & Indirect Costs	Total Costs
	Hours	\$	\$	\$	\$	\$	\$
Phase 1 CALFED - Work South of Wilbur Avenue, Wetland Grading							
Task 1.1 - Environmental	560	21,080	0	750	0	23,188	45,018
Task 1.2 Engineering Work - Wetlands	501	23,911	230,000	8,000	0	17,620	279,531
Task 1.3 - Landscaping Work	0	0	85,750	0	0	0	85,750
Task 1.4 - Education	2,079	42,107	0	0	15,000	13,053	70,160
Phase 1 Total	3,140	87,098	315,750	8,750	15,000	53,861	480,459
Phase 1 Project Management Tasks	41	2,489	0	0	0	2,016	4,505
Phase 1 CALFED Total	3,181	89,587	315,750	8,750	15,000	55,877	484,964

Phase 2

Task	Direct Labor Hours	Direct Salary & Benefits	Service Contracts	Material & Acquisition Costs	Misc. & Other Direct Costs	Overhead & Indirect Costs	Total Costs
	Hours	\$	\$	\$	\$	\$	\$
Phase 2 - CALFED - Work North of Wilbur Avenue, Wetland Grading, and Excavation							
Task 2.1 - Environmental	25	965	0	0	1,000	1,062	2,027
Task 2.2 - Right of way	55	2,746	0	427,000	2,000	2,224	433,970
Task 2.3 - Engineering Work - Wetlands	828	39,164	592,250	5,000	0	29,460	665,874
Task 2.4 - Hazardous Material Clean up	0	0	0	0	855,000	0	855,000
Task 2.5 - Landscaping Work	0	0	45,600	0	0	0	45,600
Task 2.6 - Education	4,158	84,214	0	0	30,000	26,106	140,320
Phase 2 Total	908	42,875	637,850	432,000	858,000	32,746	2,002,471
Project Management Tasks	123	7,467	0	0	0	6,048	13,515
Phase 2 CALFED Total	1,031	50,342	637,850	432,000	858,000	38,794	2,015,986

* Quarterly Budget, Schedule and Overhead Explanation attached.

COST-SHARING

Phase 1

Task	Direct Labor Hours	Direct Salary & Benefits	Service Contracts	Material & Acquisition Costs	Misc. & Other Direct Costs	Overhead & Indirect Costs	Total Costs
	Hours	\$	\$	\$	\$	\$	\$
Phase 1 Local Cost Share - Work South of Wilbur Avenue, Tidal Culverts and Environmental for the Hickmott Parcel							
Task 1.1 - Environmental	0	0	30,000	0	0	0	30,000
Task 1.2 - Right of way and Encroachment Permits	18	928	0	5,000	0	709	6,637
Task 1.3: Engineering Work - Tidal Culverts	535	26,557	276,000	5,000	0	20,035	327,592
Task 1.4 - Local In-Kind Work	706	21,180	0	0	0	0	72,620
Phase 1 Local Cost Share Total	1,259	48,665	306,000	10,000	0	20,745	436,850
Phase 1 Grand Total	4,440	138,252	621,750	18,750	15,000	76,621	921,813

Phase 2

Task	Direct Labor Hours	Direct Salary & Benefits	Service Contracts	Material & Acquisition Costs	Misc. & Other Direct Costs	Overhead & Indirect Costs	Total Costs
Phase 2 - Local Cost Share - Work North of Wilbur Avenue, Grading and Bridge/Culvert at Fulton Shipyard Road							
Task 2.1 - Right of way	42	2,195	0	15,500	0	1,657	19,352
Task 2.2 - Engineering Work - Bridge	744	35,795	460,000	0	0	26,731	522,526
Task 2.3 - Local In-Kind Work	706	39,180	15,600	0	17,840	0	72,620
Phase 2 Local Cost Share Total	1,492	77,170	475,600	15,500	17,840	28,388	614,498
Phase 2 Grand Total	2,523	127,512	1,113,450	447,500	875,840	67,182	2,630,484

APPLICANT QUALIFICATIONS

The Contra Costa County Flood Control and Water Conservation District (District) has provided the cities and the unincorporated areas infrastructure and flood protection improvements since 1951. The District's mission is consistent with public policy and regulatory agency mandates to provide flood protection while preserving riparian habitat and maintaining water quality. The partnership between the District, the City of Antioch, Mt. Diablo Audubon Society, and the Aquatic Outreach Institute represent a trend in natural repairs being sought. A multi-objective approach based on sound science is necessary to resolve the issues. The District has accepted the lead role in the creation and enhancement of 26 acres of marshland in the East Antioch Creek Watershed.

The District provides a wide range of technical services to various cities, districts, agencies, businesses, and individual residents. While providing drainage planning on a watershed basis, the expertise of flood routing, hydraulics and hydrology are needed. The Technical Support Team has been formed under the direction of Contra Costa County's Public Works Director and District Chief Engineer, J. Michael Walford. The Public Works Department and District are housed in the same office and share engineering and support personnel.

Mr. Walford has responsibility for the organization and policy guidance of the Public Works Department and the District, consisting of 270 employees with an annual budget in excess of \$55 million. A licensed civil engineer in the State of California since 1966, Mr. Walford is involved with road and flood control facility design, construction, maintenance and operations, two public airports, and will serve as the Principal Investigator for the project.

Technical Support Team

Dean Eckerson, registered civil engineer and Assistant Public Works Director, has worked for the Public Works Department for twelve years. Presently, Dean provides management and supervision for the flood control engineering operations of the Department, overseeing a staff of 25 engineers and engineering technicians and will collaborate on all of the administrative project responsibilities serving as the project administrator. Dean has had responsibility directing staff in the design and engineering of nearly \$20 million in capital improvement projects, including several emergency storm damage repairs.

Mark Boucher, Senior Civil Engineer, will serve as project manager to the Technical Support Team. Mark has been County Coordinator for the US Army Corps of Engineers projects dealing with right of way needs, utility relocations, soil disposal, environmental issues, relations with adjacent property owners, project funding and reimbursements to the Corps. Mark has participated and acted as coordinator for the Wildcat Creek Design Team, comprised of community members, federal, state, and local governments, and professional groups who have worked together to solve problems related to fish migration, and silt maintenance methods allowing for channel establishment and enhancements through a \$400,000 US Army Corps of Engineers 1135 grant.

Kathy Kramer, Executive Director of Aquatic Outreach Institute, will provide the education and public outreach component to the project through a hand-selected staff from the Institute. Over the past ten years, Kathy has developed a number of programs that involve teachers and the public in and about local water quality issues. The educational programs include four teacher-training workshops, two Watershed Awareness Programs in Alameda County, an annual conference for educators now in the tenth year, a computerized display on the San Francisco Bay and Delta, and two teacher grants programs. The programs developed under Kramer's leadership have won local, state, and national awards each year for the past six years, and she was recipient of the 1998 National Wetlands Award for Education/Outreach awarded in Washington D.C. Currently, Ms. Kramer is serving as President of Bay Area Citizens for Creek Restoration and is a member of the Board of Directors for Save San Francisco Bay Association.

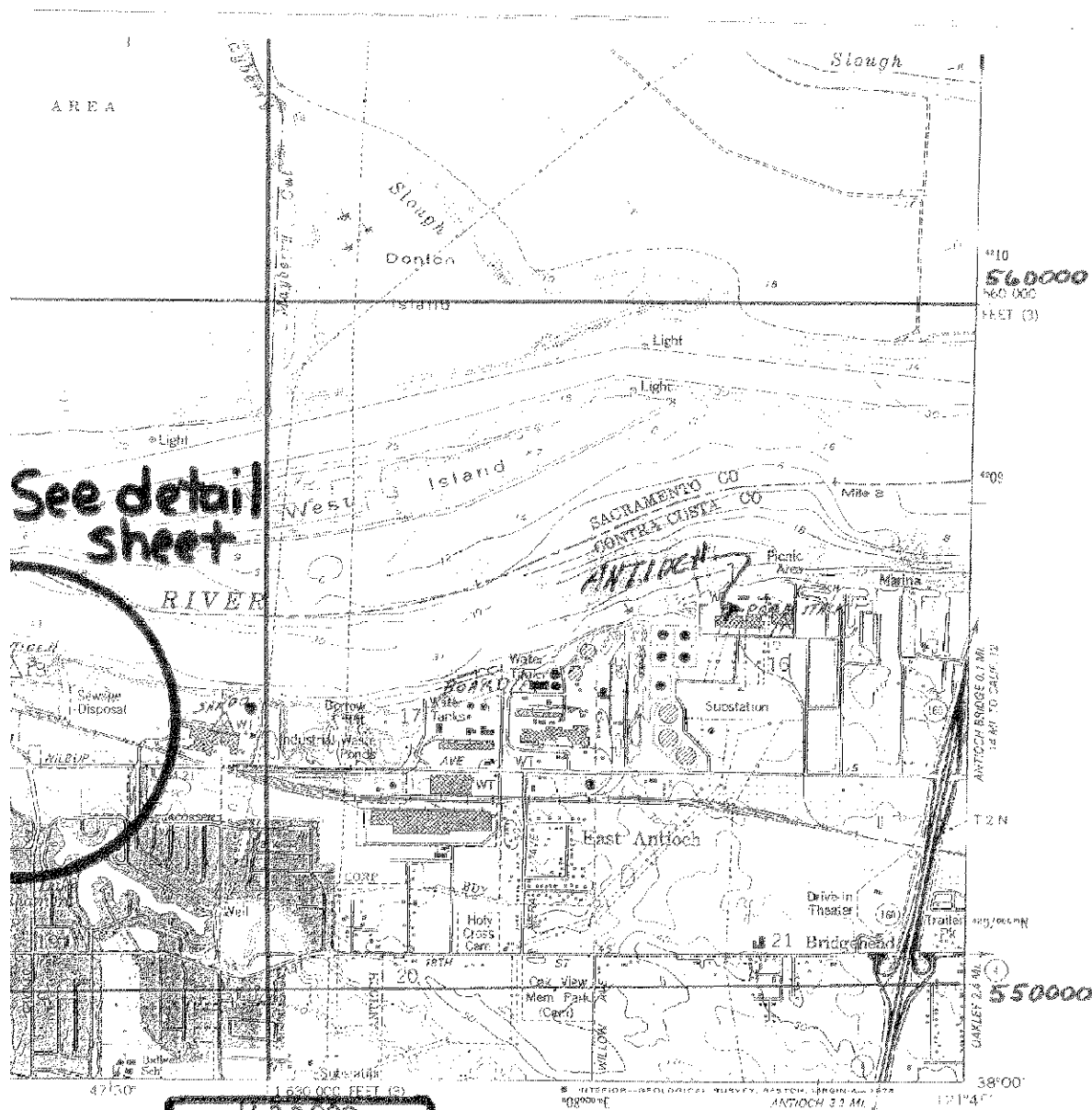
Anne Hayes, Assistant Executive Director of Aquatic Outreach Institute, manages the Sausal Creek Watershed Awareness Program. As a group leader of adults and youths at community meetings and restoration workdays, Anne has developed and implemented the volunteer water quality monitoring program in the Sausal Creek watershed. Ms. Hayes is familiar with water quality issues, particularly with regard to the transport of contaminants from urban areas into streams and the Bay.

Mt. Diablo Audubon Society was founded by a small but enthusiastic group of bird-lovers in 1952, and became a chartered chapter of National Audubon Society in 1970. With a current membership of 1,700, the Mt. Diablo Audubon Society sponsors activities which support habitat conservation and environmental education. Organizing more than 50 birding outings annually, the chapter also conducts a yearly Christmas Bird Count, is compiling a Breeding Bird Atlas for Contra Costa County, and will sponsor the third annual cleanup of East Antioch Creek Marsh. The Mt. Diablo Audubon Society was instrumental in securing the restoration and preservation of McNabney Marsh (formerly, Shell Marsh) after a major oil spill contaminated the wetlands. Chapter members have also worked toward the creation of the Delta Science Center; a CALFED Category III funded project in Oakley.

Joseph Brandt, City of Antioch's City Engineer and Director of Public Works, is responsible for the management of 120 employees providing design, review, inspection and maintenance of public works projects. Mr. Brandt oversees the City of Antioch's National Pollutant Discharge (NPDES) and Elimination System Program and has worked extensively with the Regional Water Quality Control Board as a member of the executive committee in drafting the initial 5-Year NPDES Permit for the Contra Costa Clean Water Program.

ATTACHMENTS

- A** Portion of Antioch North, Calif. 15' Quadrangle
- B** Detail Sheet of above map
- C** Notification letter to Governing Board of Contra Costa County
- D** Letter to Delta Protection Commission
- E** Quarterly Budget
- F** Schedule
- G** Explanation of Overhead Indirect Costs
- H** Compliance with Standard Terms and Conditions



1 MILE
ET

1630000
Ca Coordinate System
(typical)



SOUTH-Angle Location

Sections 18 & 19,
T2N, R2E, MDM

22092

ROAD CLASSIFICATION

Primary highway, hard surface	Light-duty road, hard or improved surface
Secondary highway, hard surface	Unimproved road

☐ Interstate Route ☐ U. S. Route ☐ State Route

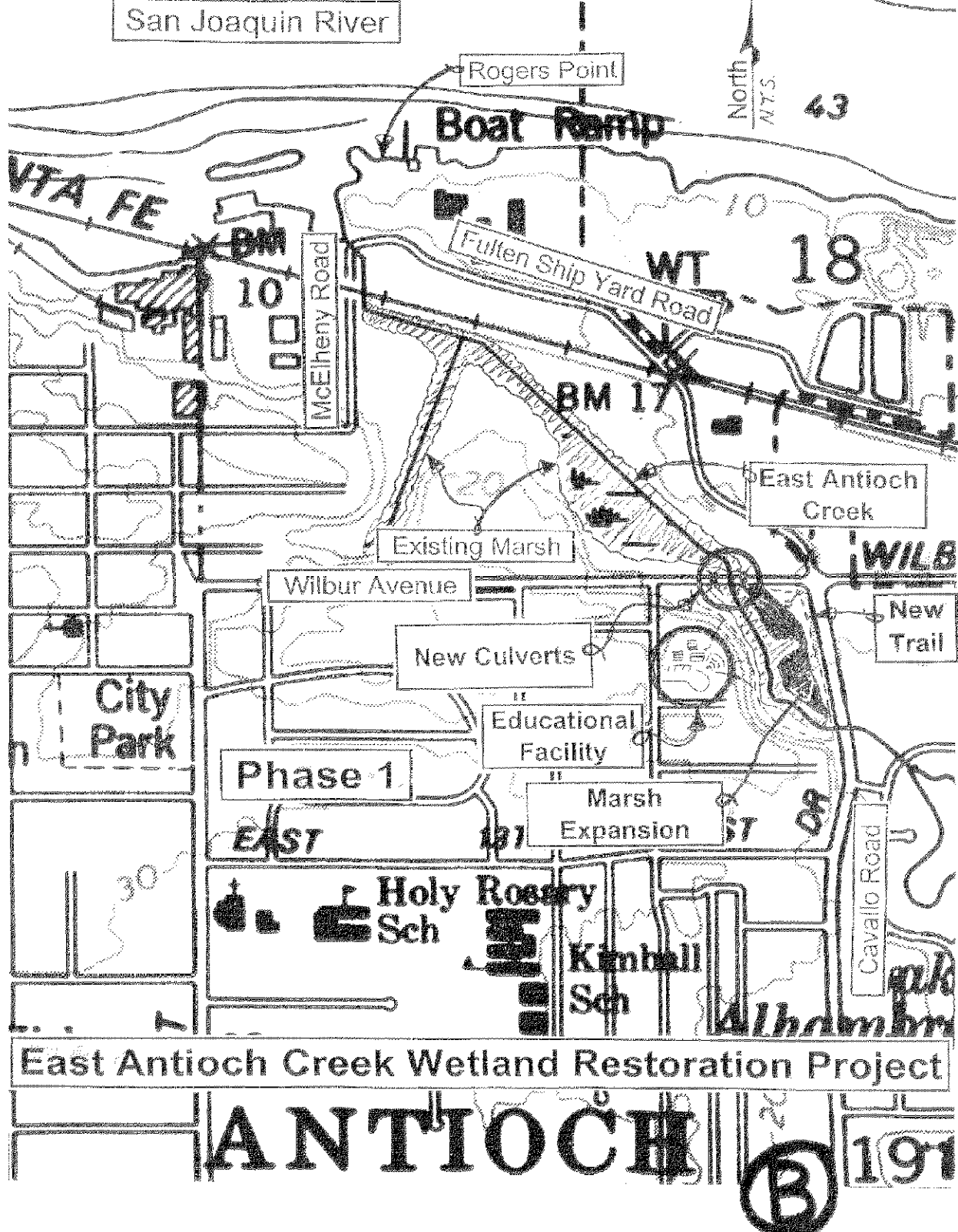
ANTIOCH NORTH, CALIF.
SE 1/4 PT 1/4 SEC 19, QUADRANGLE
N3800-W12145/7.5

1978

AND 1880 III SE-SERIES V805

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I-013910



TO: BOARD OF SUPERVISORS, AS GOVERNING BOARD OF CONTRA COSTA COUNTY AND CONTRA COSTA COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT

FROM: J. MICHAEL WALFORD, CHIEF ENGINEER

DATE: March 23, 1999

SUBJECT: AUTHORIZE the Chief Engineer to sign and submit a CALFED grant application for funding of the East Antioch Creek Wetland Restoration Project in Antioch. Project No.7566-6D8483

SPECIFIC REQUEST(S) OR RECOMMENDATION(S) & BACKGROUND AND JUSTIFICATION

I. Recommended Action:

AUTHORIZE the Chief Engineer to sign and submit a CALFED grant application for funding of the East Antioch Creek Wetland Restoration Project in Antioch. Project No.7566-6D8483

II. Financial Impact

None. Applying for the grant does not obligate the District to expend any additional funds. If CALFED awards the grant, and the District goes forward with the work, the funds expended will be from the Drainage Area 56 (DA 56) trust fund and be used for project items shown on the DA 56 Plan. The grant will be for additional funds to pay for wetland restoration and enhancements, educational and monitoring programs, and possibly creek right of way acquisition and clean up.

Continued on Attachment: X

SIGNATURE: Dean H. Palmer

RECOMMENDATION OF COUNTY ADMINISTRATOR

RECOMMENDATION OF BOARD COMMITTEE

APPROVE OTHER

SIGNATURE(S):

ACTION OF BOARD ON

APPROVED AS RECOMMENDED OTHER

VOTE OF SUPERVISORS

UNANIMOUS (ABSENT _____)

AYES: _____ NOES: _____

ABSENT: _____ ABSTAIN: _____

MC:jlg
FLDCTLVBO Mar 23 99 FAC Wetland.doc

Orig. Div: Public Works Flood Control
Contact: M. Boucher (311-2278)
cc: J. Brandt, City of Antioch
R. Minch Avalon, Flood Control
D. Edmonson, Flood Control
CAO
County Council
Accounting

SUBJECT: AUTHORIZE the Chief Engineer to sign and submit a CALFED grant application for funding of the East Antioch Creek Wetland Restoration Project in Antioch. Project No.7566-6D8483
DATE: March 23, 1999
PAGE 2

III. Reasons for Recommendations and Background:

The Flood Control District owns more than twenty (20) acres of marshland along East Antioch Creek near the Antioch Dunes National Wildlife Refuge and the San Joaquin River. This property was assembled for a future Drainage Area 56 (DA56) project designed to increase flow capacity the creek from Lake Alhambra to the San Joaquin River.

The focus of the grant proposal is for the East Antioch Creek Wetland Restoration Project (a.k.a. Habitat Restoration of the Julia Cox Freeman Wetlands Preserve) on the 7.5-acre site located immediately downstream of Lake Alhambra in a residential neighborhood south of Wilbur Avenue and west of Cavallo Road in the City of Antioch. This site is considered as Phase I of a larger project which would include similar wetland restoration of East Antioch Creek downstream and north of Wilbur Avenue. The Flood Control District has been collecting DA 56 fees for improving the capacity of the creek in this area. The grant is to pay for items of work beyond the DA 56 plan that will be implemented by the various members of a team using the grant funds and other local funds. The team will include the Flood Control District, the Mt. Diablo Audubon Society, and the City of Antioch. Efforts will be made to foster community volunteer and local school involvement.

Project Goals:

1. Increase healthy populations of native Delta plants, birds, fish, and mammals by cleaning up, expanding, restoring and monitoring the 7.5 acre Julia Cox Freeman Wetlands Preserve as a healthy saline emergent wetland.
2. Foster public understanding of wetlands habitat and its importance to our environment by establishing an onsite education facility and a small special use staging/educational area.

Implementation Plan:

The project team members have agreed to do the following:

Flood Control District

The Flood Control District will assess, design, and implement the engineering and re-vegetation of the preserve.

To this effect they will:

- perform a feasibility analysis, including soil sampling, site assessment, species survey, hydrology and topography (These are normal engineering and environmental tasks for the DA 56 project);
- prepare a conceptual design and monitoring plan;
- clean up the site, remove invasive plants and non-native wildlife;
- create additional wetlands by excavating, regrading and enlarging the existing culvert (These are normal engineering and environmental tasks for the DA 56 project);
- reestablish native plant species;
- develop methods and/or barriers to minimize the re-entry of non-native plants and wildlife;
- develop the adjacent upland habitat to provide refuge for wildlife during high tides.

SUBJECT: AUTHORIZE the Chief Engineer to sign and submit a CALFED grant application for funding of the East Antioch Creek Wetland Restoration Project in Antioch. Project No.7566-6D8483
DATE: March 23, 1999
PAGE 3

Mt. Diablo Audubon Society

The Mt. Diablo Audubon Society will develop a community outreach strategy, monitor the recovery of the preserve, and build an onsite public education facility. The goal of the outreach strategy is to involve the neighbors in the ongoing support and protection of this valuable community resource.

The current plan for the education facility includes:

- fencing the entire site;
- developing a portion of the upland as a small special use staging/educational area;
- building an education facility.

The small staging/educational area will consist of an entry road, turnaround and parking area for school buses and several cars, five picnic tables, benches, trash containers, a drinking fountain and two pump out or sewer toilets. The education facility will include a small 30-person amphitheater, a kiosk or other central display explaining the wetlands and their importance, and walkways connecting to a series of wildlife-viewing and water-sampling platforms with interpretive signs. The Mt. Diablo Audubon Society will work with local schools to develop educational programs that use the site as a "wetlands classroom."

City of Antioch

Discussions have begun with the City of Antioch to see how the site development and ongoing educational and monitoring programs may fit into their Clean Water program with a possible longer term funding support through that program. When the Clean Water funding proposal is complete, it will be brought before the City Council, which has not yet been informed of the project's potential of being part of the City Clean Water program. It is anticipated that this will be resolved before the grant deadline of April 15, 1999. The City may also have some other not yet defined long-term involvement in the completed project.

Land Acquisition and Cleanup:

There is a 5.0 acre site near the East Antioch Creek crossing of the railroad tracks known as the Hickmott parcel, owned by Antioch Diversified Development Association, which is tax delinquent and in need of some level of hazardous material clean up. The Flood Control District is currently weighting the option to acquire the parcel and clean it up using the CALFED grant monies. The purpose of that acquisition would be to prepare for the next phase of the wetland restoration project and to continue the Districts DA 56 right of way acquisitions for the creek. The initial cost of performing the Phase II environmental assessment is approximately \$40,000 and it has not yet been determined if the District will move ahead with the assessment.

IV. Consequences of Negative Action:

Failure to apply for the grant will result in possible loss of funds for wetland restoration and enhancements, and educational monitoring programs that are consistent with the District's mission statement, goals and objectives.



Contra Costa County
FLOOD CONTROL
& Water Conservation District

J. Michael Walford
ex officio Chief Engineer

255 Glader Drive, Martinez, CA 94553-4997
Telephone: (925) 313-2000
FAX (925) 313-2333

April 12, 1999

Delta Protection Commission
14215 River Road
P.O. Box 530
Walnut Grove, CA 95690

File: FCD East Antioch Creek CALFED Proposal

Honorable Commissioners:

This letter is to inform you that the Contra Costa County Flood Control and Water Conservation District is applying for a CALFED grant for improvements to habitat along East Antioch Creek. The project is located in the city of Antioch, on East Antioch Creek, between Lake Alhambra and the San Joaquin River.

The project has been divided into two phases. Phase 1 is creation of tidal wetlands between Carvallo Road and Wilbur Avenue. An important part of Phase 1 is the establishment of a nature observatory and educational area on a knoll overlooking the wetlands area. While excavating out the area around the creek to create the wetlands, islands will be developed to provide habitat for bird species. Phase 2 consists of excavating and creating tidal wetlands along East Antioch Creek from Wilbur Avenue north to the San Joaquin River. The Flood Control District owns approximately 21 acres of land along the creek that will be excavated to create the tidal saline wetland habitat for this project. The District is in the process of acquiring more property to extend the project to approximately 26 acres.

This project is a perfect match for CALFED funding. Monitoring of the project goals after construction, along with an educational component, will be performed by the Aquatic Outreach Institute and the Mt. Diablo Audubon Society. These two groups will assume the task of monitoring the goals of, and success criteria for, our enhancement project.

If you have any questions about our project, please call me at (925) 313-2203.

Very truly yours,

R. Mitch Avalon
Deputy Chief Engineer

RMA:cl
g:\admin\mitch\calfed
c: Grant Team Members
Joe Brandt, City of Antioch

D

Task for CAL-FED Funding Only	Quarterly Budget Oct Dec 99	Quarterly Budget Jan Mar 00	Quarterly Budget Apr Jun 00	Quarterly Budget Jul Sep 00	Quarterly Budget Oct Dec 00	Quarterly Budget Jan Mar 01	Quarterly Budget Apr Jun 01	Quarterly Budget Jul Sep 01	Quarterly Budget Oct Dec 01	Quarterly Budget Jan Mar 02	Quarterly Budget Apr Jun 02
Phase 1 - Work South of Wilbur Avenue, Wetland Grading											
Task 1.1 - Environmental	0	22,509	22,509	0	0	0	0	0	0	0	0
Task 1.2 - Engineering Work - Wetlands	13,977	13,977	251,578	0	0	0	0	0	0	0	0
Task 1.3 - Landscaping Work	3,430	3,430	6,003	72,888	0	0	0	0	0	0	0
Task 1.4 - Education	17,540	17,540	17,540	17,540	0	0	0	0	0	0	0
Phase 1 Sub-Total	34,947	57,456	297,629	90,428	0	0	0	0	0	0	0
Project Management Tasks	1,126	1,126	1,126	1,126	0	0	0	0	0	0	0
Phase 1 Total	36,073	58,582	298,756	91,554	0	0	0	0	0	0	0
Phase 2 - Work North of Wilbur Avenue, Wetland Grading, and Excavation											
Task 2.1 - Environmental	0	0	0	0	1,013	1,013	0	0	0	0	0
Task 2.2 - Right of way	0	0	0	0	1,085	1,085	431,800	0	0	0	0
Task 2.3 - Engineering Work - Wetlands	0	0	0	0	13,317	19,976	33,294	599,287	0	0	0
Task 2.4 - Hazardous Material Clean up	0	0	0	0	34,200	42,750	51,300	726,750	0	0	0
Task 2.5 - Landscaping Work	0	0	0	0	0	1,824	3,648	40,128	0	0	0
Task 2.6 - Education	0	0	0	0	17,540	17,540	17,540	17,540	17,540	17,540	17,540
Phase 2 Sub-Total	0	0	0	0	67,156	84,188	537,582	1,383,705	17,540	17,540	17,540
Project Management Tasks	0	0	0	0	1,689	1,689	1,689	1,689	1,689	1,689	1,689
Phase 2 Total	0	0	0	0	68,845	85,878	539,271	1,385,394	19,229	19,229	19,229
Grand Total CALFED Costs	36,073	58,582	298,756	91,554	68,845	85,878	539,271	1,385,394	19,229	19,229	19,229

Task for Local Funding Costs Only	Quarterly Budget Oct Dec 99	Quarterly Budget Jan Mar 00	Quarterly Budget Apr Jun 00	Quarterly Budget Jul Sep 00	Quarterly Budget Oct Dec 00	Quarterly Budget Jan Mar 01	Quarterly Budget Apr Jun 01	Quarterly Budget Jul Sep 01	Quarterly Budget Oct Dec 01	Quarterly Budget Jan Mar 02	Quarterly Budget Apr Jun 02
Task 1.1 - Environmental	30,000	0	0	0	0	0	0	0	0	0	0
Task 1.2 - Right of way and Encroachment Permits	332	332	5,974	0	0	0	0	0	0	0	0
Task 1.3 - Engineering Work - Tidal Culverts	13,104	13,104	22,931	278,453	0	0	0	0	0	0	0
Task 1.4 - Local In-Kind Work	18,155	18,155	18,155	18,155	0	0	0	0	0	0	0
Phase 1 Total	61,591	31,591	47,060	296,608	0	0	0	0	0	0	0
Phase 2 - Work North of Wilbur Avenue, Wetland Grading, and Excavation											
Task 2.1 - Right of way	0	0	0	0	9,676	9,676	0	0	0	0	0
Task 2.2 - Engineering Work - Bridge	0	0	0	0	1,306	1,306	519,914	0	0	0	0
Task 2.3 - Local In-Kind Work	0	0	0	0	1,452	2,179	3,631	65,358	0	0	0
Phase 2 Total	0	0	0	0	12,435	13,161	523,545	65,358	0	0	0
Grand Total Local Funding Costs	61,591	31,591	47,060	296,608	12,435	13,161	523,545	65,358	0	0	0

GRAND TOTAL PROJECT COSTS	97,663	90,172	345,816	388,162	81,280	99,039	1,062,816	1,450,752	19,229	19,229	19,229
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Year Month	1999												2000											
	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D
CAL-FED Grant Status																								
Application Complete																								
Grant Awarded																								
Work Approved by CAL-FED																								
Grant Period																								
Project Management																								
Agreements/Contracts																								
Milestone Meetings/Coordination																								
Environmental																								
Project Environmental																								
Determination of CEQA Level																								
Processing Environmental																								
Right of Way and Encroachment Permits																								
Culverts at Wilbur Ave.																								
Permit Processing																								
Acquisition																								
Engineering Work																								
Survey: RAW and Topo																								
Preliminary Design																								
Grading																								
Culverts/Bridges																								
Final Design																								
Grading																								
Culvert/Bridges																								
Construction																								
Grading																								
Culvert/Bridges																								
Landscaping Work																								
Outdoor Educational Site																								
Preliminary Design																								
Site Plan																								
Parking Lot																								
Final Design																								
Site Work																								
Parking Lot																								
Construction																								
Site Work																								
Parking Lot																								
Educational Programs																								
Educational/Outreach Program																								
Volunteer Monitoring Program																								

F

EXPLANATION OF OVERHEAD INDIRECT COSTS

The overhead and indirect costs used in the cost estimates are based on actual overhead costs for the Contra Costa County Flood Control and Water Conservation District and other Contra Costa County Public Works divisions which are expected to work on specific tasks of the project. Some rates were rounded for simplicity.

Some public agencies have lower overhead rates because those agencies receive monies from their general fund for certain facilities and support services. The County general fund does not pay any for any of the overhead for the Public Works Department or the District in Contra Costa County. The Flood Control District is managed under the umbrella of the Public Works Department as a separate division. In the Public Works Department, a separate overhead rate is determined for each division on an annual basis. Because the Flood Control District is a special district, there is an additional 6% overhead charged to compensate the County for additional overhead costs for servicing the District.

The overhead rates used in the cost estimate include costs for office space (building, janitorial and utilities), equipment use (including computers, computer network, Oracle data base services), administrative overhead, and accounting services, divisional and department training, clerical support, staff meetings, safety programs, and workers comp. The total overhead rates range from 0.64 to 1.10 depending on which division is charging to the project.

G



Contra Costa County
FLOOD CONTROL

& Water Conservation District

April 14, 1999

J. Michael Walford
ex officio Chief Engineer

255 Glacier Drive, Martinez, CA 94553-4897
Telephone: (925) 313-2000
FAX (925) 313-2333

Lester Snow
Executive Officer
Calfed Bay-Delta Program Office
1416 Ninth Street, Suite 1155
Sacramento, CA 95814

Dear Mr. Snow:

We are applying for a Calfed grant and note your requirements for our Public Works agency to comply with the non-collusion affidavit requirement (DWR form 4206).

The non-collusion affidavit form is to be filled out by bidders submitting bids to our department for work funded with the Calfed grant. When we have designed our project and it is ready for bid, we will insure that your form is included in our project specifications and that the bidders will have executed it before we award the contract for construction.

I have attached a copy of the DWR form 4206.

Thank you very much.

Very truly yours,

A handwritten signature in black ink, appearing to read "R. Mitch Avalon".

R. Mitch Avalon
Deputy Chief Engineer

RMA:lv
G:\v99-4\lsnow.doc
Attachments

c: Design Team

H

**NONCOLLUSION AFFIDAVIT TO BE EXECUTED BY
BIDDER AND SUBMITTED WITH BID FOR PUBLIC WORKS**

STATE OF CALIFORNIA)
)ss
COUNTY OF _____)

_____, being first duly sworn, deposes and

 (name)
 says that he or she is _____ of

 (position title)

 (the bidder)

the party making the foregoing bid that the bid is not made in the interest of, or on behalf of, any undisclosed person, partnership, company, association, organization, or corporation; that the bid is genuine and not collusive or sham; that the bidder has not directly or indirectly induced or solicited any other bidder to put in a false sham bid, and has not directly or indirectly colluded, conspired, connived, or agreed with any bidder or anyone else to put in a sham bid, or that anyone shall refrain from bidding; that the bidder has not in any manner, directly or indirectly, sought by agreement, communication, or conference with anyone to fix the bid price of the bidder or any other bidder, or to fix any overhead, profit, or cost element of the bid price, or of that of any other bidder, or to secure any advantage against the public body awarding the contract of anyone interested in the proposed contract; that all statements contained in the bid are true; and, further, that the bidder has not, directly or indirectly, submitted his or her bid price or any breakdown thereof, or the contents thereof, or divulged information or data relative thereto, or paid, and will not pay, any fee to any corporation, partnership, company, association, organization, bid depository, or to any member or agent thereof to effectuate a collusive or sham bid.

DATED: _____

By _____
(person signing for bidder)

Subscribed and sworn to before me on

(Notary Public)

(Notarial Seal)

NONDISCRIMINATION COMPLIANCE STATEMENT

STD. 18 (REV. 3-83) F&C

COMPANY NAME

The company named above (hereinafter referred to as "prospective contractor") hereby certifies, unless specifically exempted, compliance with Government Code Section 12990 (a-f) and California Code of Regulations, Title 2, Division 4, Chapter 5 in matters relating to reporting requirements and the development, implementation and maintenance of a Nondiscrimination Program. Prospective contractor agrees not to unlawfully discriminate, harass or allow harassment against any employee or applicant for employment because of sex, race, color, ancestry, religious creed, national origin, disability (including HIV and AIDS), medical condition (cancer), age, marital status, denial of family and medical care leave and denial of pregnancy disability leave.

CERTIFICATION

I, the official named below, hereby swear that I am duly authorized to legally bind the prospective contractor to the above described certification. I am fully aware that this certification, executed on the date and in the county below, is made under penalty of perjury under the laws of the State of California.

OFFICIAL'S NAME

Rainer Hoenicke (Rainer Hoenicke)

DATE EXECUTED

4/9/99

EXECUTED IN THE COUNTY OF

Contra Costa

PROSPECTIVE CONTRACTOR'S SIGNATURE

Anne Hayes, the Aquatic Outreach Institute

PROSPECTIVE CONTRACTOR'S TITLE

Assistant Executive Director

PROSPECTIVE CONTRACTOR'S LEGAL BUSINESS NAME

Aquatic Outreach Institute

H